

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application:

Listing of Claims:

Claims 1-6 (Canceled)

7. (Currently amended) A method of obtaining electrolytic manganese from ferroalloy manufacturing waste or any other industrial waste having manganese and an inert weight, comprising

an initial sulfation phase;

a hydrometallurgical phase comprising the steps of lixiviation, primary purification, secondary purification and conditioning; and

an electrolysis phase, wherein

said waste is ~~made to disappear, producing~~ processed to produce a secondary waste having half the inert weight and having the property of being self-compactable;

an initial sulfation process with near-stoichiometric acid consumptions is used;

the removal of impurities, primarily of iron and aluminum, is caused primarily by pH control, to produce a pulp ~~minimizing equipment used and time the equipment is used;~~

the removal of base metal impurities, mainly zinc, is caused by means of a precipitation thereof in the form of sulfurs suitable for other uses; and wherein

electrolyzed solutions are obtained having which produce manganese with a 99.9% purity.

8. (Previously presented) The method of clam 7, wherein the sulfation phase is is carried out in a furnace in which

exothermic reactions occur inside the furnace and on PTFE trays, generating SO₂ gases.

9. (Previously presented) The method of claim 7, wherein the lixiviation and primary purification steps are carried out with a consumed anolyte of an electrolysis cell or alternatively with a synthetic anolyte.

10. (Currently amended) The method of claim 7, wherein in said lixiviation step, an anolyte is used as a lixiviation agent, and wherein said lixiviation step is carried out with strong stirring in a reactor coated with an acid-resistant material ~~[[antacid]]~~.

11. (Currently amended) The method of claim 7, wherein the primary purification step is carried out in the same reactor ~~[[of]]~~ as the lixiviation, and ~~[[until raising]]~~ the pH of the pulp is raised to values near neutral pH, followed by ~~and the resulting pulp is then subjected to~~ filtering the pulp in a filter press and washing with water, preferably in the filter press itself, to obtain ~~[[obtaining]]~~ an inert waste.

12. (Currently amended) The method of claim 11 ~~[[7]]~~, wherein the washing water of the pulp is used as added water to a mixer in the initial phase of the process, or it can be re-used successive times to concentrate the manganese therein.